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TRANSFORMER BOX FOR UNIVERSAL APPLICATION
AS REPLACEMENT EQUIPMENT
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Fig. 1.

Fig. 2.
The present invention relates to a transformer box adapted for substantially universal application as replacement equipment in conjunction with electrical apparatus, and more particularly to a transformer box, which in practice will be complete with a transformer and which may be used, particularly with oil burners of a type requiring, as replacement equipment for use in the repairing and maintenance of such oil burner equipment.

As such, the present application constitutes a continuation-in-part of my prior and copending application Serial No. 570,138, filed March 7, 1956 and entitled, "Adaptable Transformer Box" and now abandoned.

Many oil burners now in use in household heating equipment and elsewhere require the use of igniting means such as a spark plug for assuring that the fuel supplied thereby is ignited as it is introduced into the combustion chamber with which such burners are associated. This is particularly true of the conventional gun-type burners used in household heating furnaces, either as original or as replacement equipment therefor.

The ignition means of such an oil burner requires a transformer for stepping up the conventional house current of 110 volts to a point required to activate the ignition means.

In view of the fact that these transformers sometimes fail and require replacement, a problem is presented to the individual or organization carrying on the maintenance and repair of equipment of this type, in that there are a large number of different types of oil burners on the market and in actual use; and even burners made by the same manufacturer may be supplied from time to time in a considerable number of sizes, designs or models. As a practical matter, each manufacturer of such equipment usually designs the type transformer and transformer box surrounding such transformer which is to be used with each particular make, size and model of oil burner respectively. If a person or organization engaged in the repair and maintenance of such equipment were required to keep in stock and on hand for use on each job all the makes and models, sizes and types of transformers and transformer box equipment required to fit every different type, size and model oil burner which he may be called upon to service from time to time, the task would be practically impossible. At the same time, even though the necessary number of different types of transformer equipment may be stocked in a town or city by one organization or another and thereby be available to the repair personnel, the inevitable delay in obtaining the necessary type, size and model is highly objectionable from the point of view of the average householder, who may be in great need of heat from his oil burner, particularly if it fails during a cold period in winter.

The present invention provides an arrangement by which a single type of transformer box, complete with a transformer, may be utilized on a very large number, if not all, of different types and models and sizes of oil burners which the average service man is called upon to attend. This is accomplished by the means embodied in the present invention by which facilities are made available in a single novel type of transformer box for attaching the power supply wires thereto from any one of a considerable number of different sides and further, for holding the transformer box onto the electrical equipment, such as an oil burner, with which the transformer box is to be used, by at least two different sides, through one of which the secondary terminals for the transformer box extend. Suitable intermediate mechanical attachment means are provided in accordance with the present invention to enable this single type transformer box to be mounted on almost any existing type and model of oil burner, for example, without requiring the service man to carry an excessively large number of parts; and, for example, in accordance with the present invention, by carrying a single type of transformer box and a relatively small number of selectively usable intermediate attachment means as hereinafter more particularly set out.

While the present invention is particularly described with respect to the attachment of a transformer box onto different types of oil burners, it will be understood that a single such box usable for containing a transformer or other more or less equivalent electrical equipment could be used with a large variety of different types of electrical equipment with which such box and its contents may be desired to be used.

Summarizing the present invention, the transformer box in accordance therewith is provided with means arranged internally thereof at diagonally opposite corners for segregating these corners from the interior thereof as recesses and for providing electrical connection selectively to either of said recesses and from selectively usable entrance points thereinto, so as to introduce electrical energy into the interior of the transformer box from any desired side which is accessible and convenient in use. This is facilitated by providing a pair of conductors extending between the recesses and connected intermediate their ends to the primary leads of a transformer which is normally contained within the transformer box. The combination of this type of transformer box, in conjunction with selectively usable intermediate attachment means, by which this box may be attached to a piece of electrical equipment in a considerable number of different ways in accordance with the requirements thereof comprise a novel combination of features enabling a minimum number of spare parts to be carried by a service man so as to fulfill the needs of a very large number of different makes, models and sizes of oil burners which might need such a transformer box as replacement equipment.

Other and more detailed objects and features of the present invention will become apparent from a detailed description of certain presently preferred embodiments thereof which are illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of a transformer box in accordance with the present invention arranged with one form of intermediate attachment means, the secondary terminals protruding from an end wall of the box adjacent to that wall which is secured to the intermediate attachment means;

Fig. 2 is a perspective view of the transformer box of Fig. 1, arranged in this instance with the same wall downwardly as in Fig. 1, but otherwise reversed end-for-end;

Fig. 3 is a perspective view of a conventional gun-type oil burner showing a transformer box in accordance with the present invention attached thereto;

Fig. 4 is a view in side elevation of the transformer box of Fig. 1, showing the intermediate attachment means lo-
cated selectively in two positions, in one of which this means is shown in broken lines; Fig. 5 is a plan substantially in vertical section of the transformer box of Fig. 1, showing another form of intermediate attachment means, this time arranged for attachment of the wall through which the secondary terminals extend in abutting relation with the electrical equipment with which the device is to be used; Fig. 6 is a plan substantially in intermediate attachment means similar to, but slightly different from the means shown in Figs. 1 and 2; Fig. 7 is a view in side elevation, showing a still further form of intermediate attachment means and further showing in dotted lines such means in different, selectively usable positions; Fig. 8 is a plan view of still another form of intermediate attachment means which may be used in lieu of the means shown in Fig. 6, for example; Fig. 9 is a view in perspective of another type of intermediate attachment means, this type being formed as an angle bracket; Fig. 10 is a view in perspective of still another form of intermediate attachment means, this type comprising a hinged bracket; Fig. 11 is a view in perspective of still another type of intermediate attachment means, this type being an offset bracket; Fig. 12 is a view in perspective with bracket parts separated, showing the manner of attachment of a transformer box to the intermediate attachment means of Fig. 9; Fig. 13 is a view in perspective with bracket parts separated, showing the manner of attachment of a transformer box to the intermediate attachment means of Fig. 10; Fig. 14 is a view in perspective with bracket parts separated, showing the manner of attachment of a transformer box to the intermediate attachment means of Fig. 11; Fig. 15 is a view in perspective with bracket parts separated, showing the manner of attachment of a transformer box to the intermediate attachment means of Fig. 10, the hinged attachment means in this instance being arranged for attachment to a different wall of the transformer box than in the case of Fig. 13; Fig. 16 is a view in perspective of a transformer box as aforesaid, using angle brackets similar to that shown in Fig. 9, but with a view of one of the different dimensions, the purpose being to show that different size brackets can be used alternatively in the same general manner; and Fig. 17 is a view similar to Fig. 16, showing a type of brackets being used which are substantially the same in each instance as shown in Fig. 9, the figure differing from Fig. 12 in that the brackets are attached to different walls of the transformer box than in Fig. 12. The transformer box is indicated generally in the several views at 10 and may be considered the same in every view in which it is shown. This box comprises a body 11 of sheet metal having lateral walls 12, a top wall 13 (in the position of the box shown in Figs. 1 and 2) and a bottom wall 14. The body 11 is closed at its ends by a removable end wall 15 (seen at the right, Fig. 1) and a removable end wall 16 (seen at the left, Fig. 1). The position of these walls of necessity must be described with respect to one position of the box as a whole, as the box is intended, in its normal use, to be positioned selectively in a number of different positions.

The box 10 is arranged to contain a transformer shown in dotted outline only in Fig. 5, at 28. The showing is made in this way as the transformer per se forms no part of the present invention, which is directed to the transformer box as such. In which a suitable transformer is located, for example, as shown in dotted lines in Fig. 5. The transformer 28 has a pair of primary leads 29 and a pair of secondary leads 30 in a conventional manner. The secondary leads are connected to a pair of suitably insulated secondary or high tension terminals 17, which extend through one of the six walls of the box 10, in this case through the end wall 16, as shown. Each of the secondary terminals 17 is provided with a suitable insulator 18, both of which extend as shown through a suitable aperture 19 in the end wall 16 (Fig. 1).

In the usual construction, the end walls 15 and 16 of the box are made removable for purposes later to be described. It is customary for these removable walls to be shown in dotted lines and are preferably made of sheets of metal. The transformer box 10 is affixed thereto by the use of an intermediate mechanical attachment means here shown generally as a mounting plate 33, the plate being mounted upon a part of the furnace structure as shown, for example, at 22, Fig. 3.

Means must be provided for the connection of electrical leads carrying a power supply for the transformer to the primary leads 29 thereof. In view of the fact that the transformer box 10 of the present invention may be associated with the electrical apparatus with which it is to be used in a number of different relations or attitudes; and as some of the places in which it may be used would make some parts accessible and other parts inaccessible, provision is made in accordance with the present invention so that there will always be some accessible portion of the transformer box to which a connection may be made for power supply to the primary leads to the transformer.

For this purpose, there is provided at each of the two diagonally opposite corners of the box 10 suitable recesses 26, each formed by an arcurate interior wall 25 formed as a portion of a cylinder or the like and extending on the one hand between two walls as 11 and 16 at the upper left hand corner (Fig. 5) and between the side wall 15 and the bottom wall 14 at the lower right hand corner (Fig. 5). It will be understood that the arcurate interior walls 25 also extend completely between the lateral walls 12, so as to separate the recesses 26 substantially completely from the remainder of the interior of the box 10.

A pair of branch leads 31 are provided extending between the two recesses 26 as shown, these leads being constituted by suitably insulated wires, the insulation extending completely from end to end of the wires as the boxes 10 are made up, and even covering those portions of the wires in different dimensions, the purpose being to show that different size brackets can be used alternatively in the same general manner; and Fig. 17 is a view similar to Fig. 16, showing a type of brackets being used which are substantially the same in each instance as shown in Fig. 9, the figure differing from Fig. 12 in that the brackets are attached to different walls of the transformer box than in Fig. 12. The transformer box is indicated generally in the several views at 10 and may be considered the same in every view in which it is shown. This box comprises a body 11 of sheet metal having lateral walls 12, a top wall 13 (in the position of the box shown in Figs. 1 and 2) and a bottom wall 14. The body 11 is closed at its ends by a removable end wall 15 (seen at the right, Fig. 1) and a removable end wall 16 (seen at the left, Fig. 1). The position of these walls of necessity must be described with respect to one position of the box as a whole, as the box is intended, in its normal use, to be positioned selectively in a number of different positions.

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The use of such potting compound is well known in the art, so that it has not been thought necessary to show it in the drawings.

The transformer boxes may be made up in this manner and the manner thus far described in which these boxes may be taken around from place to place by an oil burner service man, for example, and used as necessary as replacement equipment by attaching such boxes onto a suitable part of the oil burner in a manner hereinafter described and by making suitable electrical connections to and from the transformer box 10.

The outer end portions 34 of the secondary terminals 17 are preferably formed as threaded posts for accommodating certain conventional connection means used in this type of device. Again, as the details of this connection means form per se no part of the present invention, they have not been illustrated, except to show the ends of the terminals 17 at threaded posts at 34 in Fig. 5. If desired, a suitable nut as shown at 35, Fig. 5, may be threaded onto each post 34 for assisting in connecting these posts to other conventional connection means.

Because of the manner in which devices of this kind are to be used in accordance with a principal purpose of the present invention, in use as replacement equipment for use in connection with a large number of different types, models, and sizes of electrical equipment as oil burners, it is necessary that means be provided for mounting the transformer box of the present invention in a number of different ways and to a very considerable number of different type and size supports, some of which require one type of mounting and others requiring other types respectively. The present invention provides a plurality of selectively usable intermediate mechanical attachment means, which may be used to affix the transformer box 10 in a number of different positions to a very large number of different type supporting means as oil burners. The several different means provided in accordance with the present invention will now be described and their applicability to a plurality of different situations shown.

Considering first the mounting plate 23 shown in Figs. 1, 2 and 3, and hereinafore referred to, this plate may be formed of sheet metal in a manner very similar to the showing of the plate 24 in Fig. 6, there being a large central aperture corresponding generally to the aperture 40 of the plate 24 in Fig. 6 and of a size to surround the secondary terminals 17 and their insulators 18 as shown in Fig. 1, if the plate 23 is applied onto the end through which these terminals extend as can be done, for example as illustrated in dotted lines at the left in Fig. 4. The plate 23 is provided with a series of screw holes 53, Fig. 4, corresponding generally to the screw holes 54 shown for the plates 24 in Fig. 6, but spaced differently so as, for example, to cooperate with the uppermost and lowermost holes 51 shown in Fig. 1. Suitable metal screws 52 may, for example, be used for affixing the plate 23 selectively onto the end piece 16 through which the secondary terminals extend as shown in broken lines in Fig. 4, or onto the bottom wall 34 of the box 10 as shown in Figs. 1 and 2, and in full lines in Fig. 4.

The end portions of each of the plates 23 (Fig. 1) and 24 (Fig. 6) are provided with a plurality of slotted portions 40, for facilitating the attachment of these plates onto a suitable support forming a part of or suitably adjacent to an electrical apparatus as generally shown at 22 in Fig. 3.

The plate 24 shown in Fig. 6 may be substantially the same as the plate 23, except as to the positions of the holes 54, which are arranged in this instance to cooperate with the innermost sets of holes 51 shown in Fig. 1 and with a corresponding set of holes 53 med in the bottom wall 14. For that matter, such a set of holes could be formed in any or all the walls of the transformer box 10 as found convenient. It is usually sufficient, however, to provide for the attachment of the transformer box 10 either with the end portion (wall 16) through which the secondary leads extend directed or positioned toward the support or one other wall of the transformer box so directed, such as a wall contiguous with that through which the secondary leads extend (as bottom wall 14).

In Fig. 8 there is shown another optionally usable form of mounting plate, this plate being indicated generally at 36 and differing from the plates 23 and 24 principally in that there are flange portions at the periphery of the plate which are arranged for optional use and may be wholly or partially removed from the plate if not needed, for example, by providing score lines shown at 38, 39, 40 and 42, along which portions of the plate or body 37 may have broken away therefrom portions as 41 at the sides and inclined or rectangular portions at the top or bottom, so as to leave only those portions which are to be used in affixing the intermediate plate 36 onto an available support. The portions of a plate with suitable, selectively usable portions which are made separable by providing score lines as shown in Fig. 8 is to be considered within the purview of the present invention. As shown, some of these score lines are arranged in a manner parallel to the sides of a box 10 with which the mounting plate may be used (score lines 39 and 42); while others (score lines 38 and 40) are arranged on a slant, so that corner portions may be broken off and discarded. In this way a mounting plate is provided which may be in effect tailored on the job to a number of particular situations, the same plate at the start being adapted, by suitable removal of unnecessary portions, to a large number of different installations.

Another and very useful type of intermediate mounting means comprises a plurality of conventional bolts, such as carriage bolts shown at 70 in Fig. 5, which may be extended through from the side of one wall of the box 10 and be suitably secured in a conventional manner to any available support. One arrangement for the reception of the head portions of these bolts 70 is indicated in Figs. 1 and 5, wherein there are illustrated T-shaped slots 71 (Fig. 1) through any portion of which a bolt 70 may extend. It is sometimes convenient in connection with a T-slot of this kind, to introduce the head of the bolt through the box wall at the intersection of the two arms of the T, the sheet metal of the wall being sufficiently flexible to permit this action. Once the bolt has had its head projected therethrough, it may be moved anywhere along the cross slot or stem portion of the slot of the T to a desired position in relation with the facilities available for attachment of the stem portions of the bolts 70 to the supporting means of the transformer box.

Another arrangement which is often desired and which is illustrated particularly in Figs. 1 and 5, is that of a shield 72, comprising a piece of relatively thin sheet metal attached to the inside of the box wall at one or more spots, or along one edge, as the upper edge shown in Fig. 5, and otherwise unattached to the walls of the box 10. This shield serves to prevent the potting compound from flowing into and sealing the T-slots 71, Fig. 1, while at the same time being sufficiently resilient to permit the introduction of the bolt heads at the intersection of the T to the position shown in Fig. 5, and further assisting in preventing the inadvertent rotation of the bolts 70 during installation of the apparatus of this invention and when a suitable nut is being tightened onto such bolt to hold the transformer box firmly in place. Primarily, however, this rotation is prevented by making the hole through which the bolt extends with flat sides to cooperate with the square section portion of the carriage bolts immediately beneath the head portion thereof.

There are also shown in Figs. 12-17 inclusive, not only T-slots 71, but also rectangular knock-out portions 74, 75, 76 and 77. It will be understood that suitable
knock-out portions as illustrated, for example, at 74—77, may be provided at any suitable points and in any of the six walls of the box 16. In using holes made by knocking out any of the portions 74—77, it is usually necessary to remove the end wall 16 in which these knock-outs are provided so as to insert the bolts 70 from the inside thereof, which may be done by removing the associated screws 20. The bolts to be used are then inserted through the holes formed at the knock-out portions and from the inside and with the stem of the bolts facing out in a manner similar to that illustrated for the bolt 70 in Fig. 5; following which the end wall is suitably reassembled with the remainder of the transformer box 10.

A situation is often encountered in practice, in which a support forming, for example, a part of an oil burner, may have a hole therein over which the transformer box may be mounted in accordance with the design for the oil burner apparatus, the hole being arranged so that the transformer box serves to close the hole in question and to prevent undesired leakage of air into or out of the oil burner casing. The transformer box of the present invention and/or its mounting means, inclusive, for example, plates 23, 24 or 36, are so arranged as to coordinate with this purpose or use of the transformer box and form what is, in effect, an air-tight seal over this opening as has just been described. The arrangement of the transformer box and its mounting, so as to close an opening for the efficient operation of the associated oil burner is, therefore, to be considered within the purview of the present invention.

In Fig. 7, another form of intermediate mechanical attachment means for attaching a transformer box 10 onto a suitable support is illustrated. As shown in this figure, a plate 78 may be suitably attached to the transformer box in the manner hereinafore described for the plates 23 or 24, or for that matter, in any other suitable desired manner. This plate 78 may have suitably secured thereto or formed thereon, spacing portions or shims 43 to serve as bearing supports for abutment against a supporting portion of the electrical apparatus with which the transformer box is to be used. There is further provided, in a manner to be securable to the plate 78, one or more slotted members 45 which may be disposed at different selected angles and may be selectively mounted as shown both in full and dotted lines in Fig. 7. In each instance, a slotted member 45 is secured to the plate 78 by a screw 44 or without the use of a screw 44 at 73, being provided on or about the screw to hold the slotted member at a desired level with respect to the level of the face of the plate 78 and that of the shims 43. It will be understood that one, two or more of the slotted members 45 may be used, these members being selectively disposed inwardly of or outwardly from the plate 78, as shown, for example, by the full line showing of one of the members 45 disposed inwardly of this plate, while at the lower left hand portion of the Fig. 7, one of these members is shown extending outwardly from the plate. As shown, there may be one of the screws 44 at each of the four corners of the plate 78 to and all of which a slotted member 45 may be secured. Each of the slotted members 45 is preferably provided with a laterally offset or crank-end portion 47 as shown in full lines in Fig. 7, enabling these members to be used in either the full line position or one of the dotted line position shown in that figure, for example. These members may be used in a particular installation may in turn be secured to the supporting means onto which the transformer box 10 is to be mounted, for example, by bolts as shown at 48, extending through slots 46 formed in each of the slotted members which are used and suitably secured to the supporting means as hereinafore described for the bolts 76.

The bolts 48 are also preferably of the carriage bolt type and thus are provided with square portions located in the slot 46 to prevent rotation of the bolts respectively while a nut or equivalent means is being tightened thereon.

In Figs. 9 and 12 is shown another embodiment of the intermediate mechanical attachment means which may be used to secure a transformer box as shown at 10, to a suitable support. In accordance with this embodiment of the invention, preferably two and possibly more angle brackets indicated generally at 57 may be used. In each of these brackets having laterally or longitudinally slotted portions as shown, the bracket particularly illustrated in Fig. 9 including, for example, one leaf portion 57a provided with inwardly extending slots 62 similar to slots 49 above described, and also including relatively large holes 65 for optional use with bolts. The other leaf of the angle bracket 57 is indicated at 57b and includes longitudinal slots 61, which may be employed for attaching the angle bracket 57 to the box 10, suitable metal screws 55 extending through the slots 61 and into holes 56 in the box 10 for this purpose.

As shown in Fig. 17, the brackets 57 are arranged so that they may be secured to the sides of the transformer box, so as to position the secondary terminals 17 toward the support to which the transformer box is to be secured; while in Fig. 12, an end portion of the transformer box is arranged to be secured in abutting relation to the support with the secondary terminals 17 extending laterally therefrom. The holes 56 may be suitably provided in the box 10 in several relations, so that the transformer box 10 may be mounted in any desired attitude with respect to the support. As a further modification, as illustrated at the left in Fig. 16, one bracket 57c may be formed with one leaf elongated to a greater extent than in the case of the bracket 57 shown in Fig. 9, for example, as shown for the leaf 57d. This will enable the transformer box to be secured in places where the bolts used for securing the brackets to the support must be spaced further apart than could otherwise be accommodated.

In Figs. 10 and 13, a further form of intermediate mechanical attachment means and its use is illustrated, this means comprising a hinged member 59 having leaves 59a and 59b, which are hinged together in a conventional manner at their intersections. The leaf 59a may be provided with suitable open or closed slots, the latter being illustrated in this instance at 59c. It will be understood that the purpose is the same as the open slots 62 in the leaf portion 57d of Fig. 9 and of the leaf portion 57b. The other leaf 59b is shown provided with slots 63 corresponding functionally to the slots 61 shown in Fig. 9. Each leaf 59a or 59b may be attached to the transformer box and the other one attached to the support with which the transformer box is associated in use, such for example, the structure of an oil burner 21 (Fig. 3). This arrangement further provides for the hinging of a transformer box for inspection or servicing when only one of two of the hinge-type brackets is unfastened from a member to which it is secured. It is considered that this form of attachment means may be adapted for a number of power installations and a further use of this type of mounting means, it is contemplated that it may be used where the surface of the supporting means to which it is to be secured (other than the transformer box) is at some angle other than parallel or at right angles to the faces of the transformer box.

The hinge arrangement will, of course, adapt itself to a large number of different situations of this kind.

In Fig. 15, a hinge bracket 59 is shown in position to be secured to a transformer box in a different relation from that in which the hinge brackets 59 are adapted to be secured in accordance with the showing of Fig. 13. In this view, Fig. 15, only one hinge bracket is intended to illustrate the principle that one, two or more brackets of this or other types herein disclosed, may be used as desired in any given installation.
In Figs. 11 and 14 is shown a still further form of intermediate mechanical attachment means. In these figures, an offset bracket 59 is shown, comprising a pair of substantially parallel portions 59a and 59b connected by an integral intermediate portion 60. The portion 59a is suitably provided with open or closed slots, the latter being shown at 67 corresponding to the slots 58c of the bracket 58 (Fig. 10). Alternatively, it is contemplated that open slots similar to the slots 62 or 49 could be used if desired. The portion 59b is provided with elongate slots 64 and also with a central opening 68, any one of which could be used for attaching screws or bolts as indicated, for example, by the screws 55, Fig. 14. Brackets of this kind may be used wherever the configuration of the supporting means is such as to require or permit such use. Again, it will be understood that these brackets may be secured to any of the walls of the transformer box 10, so as to present the secondary terminals 17 in a desired relation to the equipment with which it is to be used and connected.

While there is herein illustrated and described a number of possible alternative constructions, particularly as to the intermediate attachment means, other means equivalent to those particularly described will suggest themselves to those skilled in the art from the foregoing disclosure. It is intended, therefore, that the scope of the present invention shall be defined by the appended claims, which are to be construed validly as broadly as the state of the art will permit.

What is claimed is:

A transformer box adapted for substantially universal application as replacement equipment in conjunction with electrical apparatus, comprising a sheet metal casing made up of six substantially rectangular walls, said casing enclosing an electrical transformer having primary and secondary leads; a pair of interior walls secured in said casing, each extending between a pair of opposite side walls and also between another pair of side walls which join at a corner, and each interior wall serving to segregate a corner portion of the interior of said casing as a recess, said interior walls providing such recesses at diametrically opposite corners of the interior of said casing, knock-outs in at least three of the outside walls bounding each of said recesses for affording selectively usable access points for conductors introducing primary current for said transformer, a removable cover for each recess giving access thereto for making electrical connections for conductors therein; a pair of conductors, each insulated throughout its length and both extending between the interiors of said recesses and connected intermediate their ends to said primary leads respectively, so that electrical energy from an external source may be connected to said transformer via either of said recesses, said insulated conductors and said primary leads; a pair of insulated secondary terminals extending through one of said six walls and connected respectively to said secondary leads; the entire interior of the transformer box, except for said recesses, being filled with a potting compound; and intermediate mechanical attachment means adapted to be secured (a) to an external support for said transformer box and (b) selectively to different parts of said transformer box itself, so as selectively to position either the wall through which said insulated secondary terminals extend or another predetermined one of said six outside walls toward said external support for said transformer box.

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